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bbe 1.07e-09	Oligonucleotide pro	051746		•	37		_
.co 3.63e-12	Base substituted E.	N81164		18.0	4 4 1 1		_
,co 2.02e-13	Base substituted E.	N81164		18.9	<u>ئ</u> د د	- س	
c 2.53e-142	Human colon specific	T45883	548 27	99.1	226	21	
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to have a being printed, tion.	predicted by chance score of the result otal score distribu	the	the number of resuent to than or equal to do by analysis of t	is tater	Pred. No. score gre and is de	טי גט גם	
	426; scale 1.732	Variance 4.		Mean 7	istics:	ist	
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Human pro-urokinase c DNA encoding natural Full length human uro Modified prourokinase Human pro-urokinase c	Synthetic uPA1-48 gen Mixed oligonucleotide DC43 TSAR library gen Generic DNA sequence Generic DNA sequence Sequence encoding hum	TSAR-9 library genera Human endothelin ETA Human interleukin 8 a	-9 library ger -9 library ger -9 library ger	DC43 TSAR library gen DC43 TSAR library gen DC43 TSAR library gen DC43 TSAR library gen DC43 TSAR library	endoth endoth	DNA sequenc DNA sequenc DNA sequenc	Generic DNA sequence Generic DNA sequence
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ALIGNMENTS

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PN US5733748-A.

PD 31-MAR-1998.

PD 31-MAR-1998.

PF 66-JUN-1995; 469667.

PR 06-JUN-1995; US-489667.

PR 06-JUN-195; US-48967.

PR 06-JUN-195; US-489667.

PR 06-JUN-195; US-489667.

PR 06-JUN-195; US-4896
Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 228; Conservative
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V16671;
V16671;
V16671;
22-JUN-1998 (first entry)
Polynucleotide sequence of a colon-specific gene.
Colon-specific gene; probe; detection; expression; human;
diagnostic assay; colon cancer; antibody; screening; ss.
Homo sapiens.
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1..406
/*tag= a
Score 228; DB 40; I
Pred. No. 8.83e-144;
0; Mismatches 0;
                                                                Length 548;
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12.3

114 12

Q70466

Generic DNA sequence

2.23e-04

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Best Local S
Matches 22
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Homo sapiens.
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Claim 1; Fig 4; 60pp; English.

13 CDNA clones (145880-92), most of them partial clones, correspond to human colon specific genes, designated CSG1, CSG2, etc., that are primarily expressed in tissues derived from the colon. CSG7 and CSG10 show reduced expression in colon cancer cells as compared to that in normal cells; the remaining genes are overexpressed in colon cancer. The partial CDNA sequences can be used to isolate full-langth clones and genomic clones including the complete gene.

CSG nucleic acids can be used to produce CSG polypeptides (see also MO6545-53) in transformed host cells, as probes to detect disorders of the CSG on the colones and general and colones are colones and general and colones are colones and set of the CSG on the colones are colones are colones and set of the colones are 
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T45883
T45883;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human colon specific genes and their expression products - detect of which, in non-colon tissue samples, can be used as indication
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 97-043054/04.
P-PSDB; W06547
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12-DEC-1996.
06-JUN-1995; U07289.
06-JUN-1995; WO-U07289.
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                     aaaatgaacgatgaaagcaggaaactcttctctgacttgggcagttcc 237
                                                                                                                    cttaaagaaattccggggggtgcactggtgctggtgcctcctacgacgatccaggggacc 189
                                                                                                                                                                                                              gtgctgggacagaaggcatttgacatgtactctggagatgttatgcacctagtgaaattc 129
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                                                                                            CTTAAAGAAATTCCGGGGGGTGCACTGGTGCTGGTGGCCTCCTACGACGATCCAGGGACC
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    AAAATGAACGATGAAAGCAGGAAACTCTTCTCTGACTTGGGGAGTTCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        137 A;
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Pred. No. 2.53e-142;
0; Mismatches 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        172 G;
                                                                                                                                                                                                                                                                                                                                                                                                                        Length 548;
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Best Local S
Matches 1
                                                                                                                                                                                                                                                                                           Q51746;
Q51746;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Random point mutations were introduced into the alpha fragment of E.coli beta-galactosidase. The wild type sequence was obtained as a single stranded template and an oligonucleotide was hybridised to it to generate a popn of DNA molecules which terminate at all possible nucleotide positions within a specified region. The variable 3' ends generated in this way are used as primers for reverse transcriptase. Nucleotides are completed to forms that can be amplified and the molecules are completed to forms that can be amplified and then expressed in a suitable host-vector system. The sequence covers all 176 difft base substitutions, most of which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Introducing random point mutations into nucleic acods - by prepn of single stranded template, annealing a primer misincorporation, completion of molecules and screening.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N81164 standard; DNA; 204 BP
N81164;
OB-NOV-1990 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lehtovaara P, Knowles J, WPI; 88-279927/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Base substituted E.coli beta-galactosidase alpha-fragment. E.coli beta galactosidase alpha-fragment; base substitutions;
Claim 3; Page 14; 23pp; English.
Oligonucleotide probe MK14-A consists of nucleotides 5-95 of (Q51735). It hybridized to all spp. of mycobacteria tested, cross reacted to a few non-mycobacterial spp. The probe may be useful as an initial screen for mycobacterial infection.
                                                                                                                (BECT ) BECTON DICKINSON Shank DD, Spears PA; WPI; 93-378844/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               occurred singularly in any given mutant. See also P80575.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-APR-1987; US-034819.
(SUSO) SUOMEN SOKERI OY
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05-MAY-1988
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                                                                                     New oligo:nucleotide probes specific for Mycobacteria - u detection and amplification of Mycobacteria nucleic acid
                                                                                                                                                        01-DEC-1993.
24-MAY-1993; 108325.
26-MAY-1992; US-889651.
                                                                                                                                                                                                       Synthetic.
EP-571911-A.
                                                                                                                                                                                                                                      SS.
                                                                                                                                                                                                                                                 Oligonucleotide probe MKI4-A Oligonucleotide; DNA probe; n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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                                                                                                                                                                                                                                                                                 31-MAY-1994
                                                                                                                                                                                                                                                                                                                                                                      170
                                                                                                                                                                                                                                                                                                                                                                                                  151 cncccbnnhvchnvhbnnhrnwayvrhdarrddvhccvchc 191
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                                                                                                                                                                                                                                                                                                                                                                      ATCCAGGGACCAAAATGAACGATGAAAGCAGGAAACTCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                               TAGTGAAATTCCTTAAAGAAATTCCGGGGGGGGTGCACTGGTGCTGGTGGCCTCCTACGACG 169
                                                                                                                                                                                                                                                                                                            standard;
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10; Conser
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187..204
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 43;
Pred. No.
55; Misma
                                                                                                                                                                                                                                                  mycobacteria; disease
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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DC43 TSA
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AR library ge
   5.61e-03
6.40e-02
6.40e-02
2.10e-01
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ALIGNMENTS

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RESULT 1

D V16671;
AC Colon-specific gene; probe; detection; expression; human;
AC Colon-specific gene; probe; detection; expression; human;
AC Colon-specific gene; probe; detection; expression; human;
AC CDS 1.406
FT CDS 1.407
PN US5733748-A.
PD 31-MAR-1995; US-469667.
PR O6-JUN-1995; 459667.
PR O6-JUN-1995; US-469667.
PR O6-JUN-1995; US-469667.
PR O6-JUN-1995; US-469667.
PR O6-JUN-1995; US-469667.
PR O6-JUN-1995; W16878.
P-PSDB; W16878.
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06-JUN-1995;
06-JUN-1995;
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T45883;
13-MAR-1997 (first entry)
Human colon specific gene CSG4 cDNA partial clone,
Colon specific gene; CSG4; colon cancer; metastasis; diagnosis;
gene therapy; ss.
                                                                                                                                                                                                                                                                                       colon cancer metastasis

Claim 1; Fig 4; 60pp; English.

13 cDNA clones (745880-92), most of them partial clones, correspond to human colon specific genes, designated CSG1, CSG2, etc., that are primarily expressed in tissues derived from the colon. CSG7 and CSG10 show reduced expression in colon cancer cells as compared to that in normal cells; the remaining genes are overexpressed in colon cancer. The partial cDNA sequences can be used to isolate full-length clones and genomic clones including the complete gene. CSG nucleic acids can be used to produce CSG polypeptides (see also w06545-3) in transformed host cells, as probes to detect disorders of the colon, partic, colon cancer and colon cancer metastasis, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human colon specific genes and their expression products - detection which, in non-colon tissue samples, can be used as indication
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(HUMA-) HUMAN GENOME SO
ROSEN CA, Yu G;
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Local Similarity 99.6%;
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| Babgaacbgcccbgacacbaacaaatacgbgggatggccagagctgctggagatggaggg
                                        aagcaggaaactcttctctgacttgggcagttcctacgcaaaacaactgggcttccggga
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Pred. No. 1.37e-154;
0; Mismatches 1;
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EP-571911-A.
01-DEC-1993.
24-MAY-1993;
26-MAY-1992;
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Q51746;
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Oligonuclectide probe MK14-A consists of nuclectides 5-95 of (051735). It hybridized to all spp. of mycobacteria tested, cross reacted to a few non-mycobacterial spp. The probe may be useful as an initial screen for mycobacterial infection. See also 051735-75 and 051747-59.

Sequence 91 BP; 5 A; 17 C; 15 G; 4 T;
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(BECT ) BECTON DICKINSON
Shank DD, Spears PA;
WPI; 93-378844/48
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Oligonucleotide probe MK14-A
Oligonucleotide; DNA probe; m
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Oligonucleotide; DNA probe; mycobacteria; disease diagnosis;
                                                                                                                                    oligonucleotide probe MK14-A consists of nucleotides 5-95 of (Q51735). It hybridized to all spp. of mycobacteria tested, cross reacted to a few non-mycobacterial spp. The probe may be useful as an initial screen for mycobacterial infection. See also Q51735-45 and Q51747-59.

Sequence 91 BP; 5 A; 17 C; 15 G; 4 T;
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Q51746;
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24-MAY-1993; 108325.
26-MAY-1992; US-889651.
(BECT) BECTON DICKINSON
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                                                                                                                                                                                                                                                                                                                            New oligo:nucleotide probes detection and amplification
                                                                                                                                                                                                                                                                               Claim 3; Page 14; 23pp;
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                                            Score 36;
Pred. No.
43; Misma
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Pred. No. 1.27e-11;
45; Mismatches 4
                                                Mismatches
                                            . 1.24e-08;
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                                                                                                                                                                                                               Query
   155.22.380.1786.22.26

    n.a. database search, using Smith-Waterman algorithm

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Listing first
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(1-187) from US09052855A.вед
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45 summaries
 T45883
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Human colon specific Polynucleotide sequen Oligonucleotide probe Base substituted E.co Base substituted E.co Oligonucleotide probe Generic DNA sequence Generic DNA sequence
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 7.00e-72
7.00e-72
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7.17e-08
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ribosoma	3	flt-3 11ga	S86/S109 F	s' tumour ge	Generic DNA sequence	Human IL5 antisense o	DC43 TSAR library gen		ę	Ю		Genomic hNET sequence	HSV-1 gB and surround	0	Generic DNA sequence	brary ç	DC43 TSAR library gen	TSAR-9 library genera	Generic DNA sequence	Generic DNA sequence		ry ger	se antisense ol	tonin gene rela	endothelin-1 a	endothelin-1	ic DNA sequenc	ase antisense o	eneric DNA	eneric	sequenc
.22e+0	. 22e+0	.22e+0	.22e+0	.22e+0	.22e+0	.22e+0	.22e+0	.22e+0	. 22e	.22e+0	.71e+0	.71e+0	.71e+0	.71e+0	.71e+0	.71e+0	.71e+0	.71e+0	.97e-0	.97e-0	.97e-0	.61e-0	.29e-0	.53e-0	.53e-0	.53e-0	.53e-0	.57e-0	.57e-0	5.39e-03	.39e-0

ALIGNMENTS

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RESULTANT OF SERVICES OF SERVI
                                                                                      colon cancer metastasis

Claim 1; Fig 4; 60pp; English.

Claim 2; Fig 4; 60pp; English.

Claim 1; Fig 4; 60pp; English.

Claim 2; Fig 4; 60pp; English.

Claim
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T45883;
T3-MAR-1997 (first entry)
Human colon specific gene CSG4 cDNA partial clone.
Colon specific gene; CSG4; colon cancer; metastasi
gene therapy; ss.
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of which, in non-colon
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 97-043054/04.
P-PSDB; W06547.
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06-JUN-1995; WO-U07289
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A, Yu G;
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1..408
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on tissue samples, can be used as indic
Score 152;
DB 27;
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Length 548
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.est Local s
Matches 16
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                                   Q51746 standard;
Q51746;
31-MAY-1994 (fir:
Oligonucleotide p:
Oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                            Cancer micrometastases
Claim 15; Fig 4; 51pp; English.
V16668-81 represent polynucleotide sequences of partial or full-length cDNA clones of colon-specific genes. The polynucleotides can be used as probes to detect expression of the corresponding human genes, e.g. in diagnostic assays for detecting micrometastases of colon cancer. Recombinant cells containing the polynucleotides can be used to produce the polypeptides, in order that antibodies can be raised and used in further screening or diagnostics.

Sequence 548 BP; 137 A; 128 C; 173 G; 107 T;
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Rosen C, Yu G;
WPI; 98-229823/20.
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06-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-JUN-1998 (first entry)
Polynicleotide sequence of a colon-specific Colon-specific gene; probe; detection; expradiagnostic assay; colon cancer; antibody; so
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Colon-specific nucleic acids - useful as probes for detecting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P-PSDB; W46878.
Synthetic.
EP-571911-A.
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                                                                                                                                                               ccggcaggctgn-aggaggaggagcagggggtgctgctgcgtggaaggtgctgct
                                                                                                                                                                                                                 ctgtggctcttcctcagccaggggcctgaaggaagytcctgcctgcattaggagtcanagc 473
                                                                                                                                                                                                       GGGATGGCCAGAGCTGCTGGAGATGGAGGGCTGCATGCCCCCGAAGCCATTTTAGGGTGG
                                                                                                                                                                                                                                                                       gggatggccagagctgctggagatggagggctgcatgcccccgaagccattttagggtgg 413
                                                                                                                                                CCGGCAGGGGCTGAGGAGGAGGAGCAGNGGGTGCTGCGTGGAAGGTGCTGCA
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US-469667.
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                                                                  (first entry)
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                                                  probe MK14-A
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                                                                                           CDNA;
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                                       probe;
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                                                                                                                                                                                                                                                                                                           Score 152;
Pred. No. 7.
1; Mismatci
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1; Mismatches 8;
                                         mycobacteria;
                                                                                                                                                                                                                                                                                                              e 152; DB 40; Length 548
l. No. 7.00e-72;
Mismatches 8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               expression; human;
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                                         disease
                                                                                                                                                                                                                                                                                                                                        Length 548;
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24-MAY-1993; 108325.
26-MAY-1992; US-889651.
(BECT) BECTON DICKINSON C
Shank DD, Spears PA;
WPI; 93-378844/48.
                                                                                                                                                                                                                                                                                                                                                                                                             05-MAY-1988;
30-MAR-1988;
03-APR-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 3; Page 14; 23pp; English.
Oligonuclectide probe MK14-A consists of nucleotides 5-95 of (051735). It hybridized to all spp. of mycobacteria tested, cross reacted to a few non-mycobacterial spp. The probe may be useful as an initial screen for mycobacterial infection. See also Q51735-45 and Q51747-59.
Sequence 91 BP; 5 A; 17 C; 15 G; 4 T;
                                                                                                                                              Random point mutations were introduced into the alpha fragment of E.coli beta-galactosidase. The wild type sequence was obtained as a single stranded template and an oligonucleotide was hybridised to it to generate a popn of DNA molecules which terminate at all possible nucleotide positions within a specified region. The variable 3' ends generated in this way are used as primers for reverse transcriptase. Nucleotides are misincorporated by the transcriptase and the molecules are completed to forms that can be amplified and then expressed in a suitable host-vector system. The sequence covers all 176 difft base substitutions, most of which see also P8575.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New oligo:nucleotide probes detection and amplification
                                                                                                                                                                                                                                                                                                                              Introducing random point mutations into nucleic acods - by prepn of single stranded template, annealing a primer misincorporation, completion of molecules and screening.
                                                                                                                                                                                                                                                                                                                                                                        (SUSO) SUOMEN SOKERI OY. Lehtovaara P. Knowles J. WPI; 88-279927/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-NOV-1990 (first entry)
Base substituted E.coli beta-galactosidase alpha-fragment.
E.coli beta galactosidase alpha-fragment; base substitutions;
Escherichia coli
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N81164 standard; DNA;
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                                                      80
                            27
bbvynvhnhnncncccbnnhvchnvhbnnhrnwayvrhdarrddvh 185
                           AGGGCTGCATGCCCCCGAAGCCATTTTAGGGTGGCTGTGGCTCTTCCTCAGCCAGGGGCC
                                                    hvgccgymrttthhyrrmrbnvyrdynrsdaaawyccyrrsvkydccynachhddhyvyb 139
                                                                                h 20.7%;
Similarity 9.4%;
10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                105163.
US-034819.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                      BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers 19..69
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